

## CHALLENGE

We have 24 hours allocated to each day due to the rotation of the earth on its axis. If you have a globe and torch, use these to show the tilt of the earth and how night turns to day. As an experiment to track the rotation of the earth, make your own flowerpot sundial using:

- **Lengths of cane, dowelling or strong plastic**
- **Large flowerpots with labels to write on around the inside edge**
- **Earth or sand**

Place the cane in the flowerpot and fill the pot with sand to ensure that the cane is straight and secure. Position the flowerpot in a sunny location so that each hour, exactly on the hour, you see where the shadow crosses the pot cane and mark the time on the pot throughout one day e.g. 10:00, 11:00, etc.

**“YOU CANNOT CHANGE THE CIRCUMSTANCES, THE SEASONS, OR THE WIND, BUT YOU CAN CHANGE YOURSELF. THAT IS SOMETHING YOU HAVE.”**  
Jim Rohn

## TALK ABOUT

Investigate and **talk about different changes that can take place within the natural world** such as the seasons and living things like caterpillars, tadpoles and flowering plants.

## SHARE IT

Draw a poster showing the life cycle of a frog or the ways that life is reproduced in plants and animals. **Can you put this up in your window for others to see, or share it with family members via video chat?**

## DID YOU KNOW?

The **Earth's rotation is gradually slowing down?** A day will last about 25 hours... 140 million years from now.

The sun is **so big** that over one million earths could fit inside it!

